

Michael O. Leavitt
Governor
Dianne R. Nielson, Ph.D.
Executive Director
Don A. Ostler, P.E.
Director

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

288 North 1460 West P.O. Box 144870 Salt Lake City, Utah 84114-4870 (801) 538-6146 (801) 538-6016 Fax (801) 536-4414 T.D.D.

DIV. OF CIL, GAS & MINING

March 3, 1994

Wayne Hedberg, Permit Supervisor
Division of Oil, Gas & Mining, Minerals Regulatory Program
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, Utah 84140-1203

RE: Drain Pipe, Hecla Tailings Impoundment Consent Settlement Agreement No. UGW93-04

Dear Mr. Hedberg:

We received your Facsimile transmission dated February 14, 1994, regarding Hecla's request to seal the drain at the Escalante tailings pond west of Cedar City.

Our review of this request raises several concerns. We agree that the pond has a clay liner and the underlying deposits appear to have a low permeability. In addition, the cap for the tailings is designed and controlled to exclude moisture. Under this scenario, closure of the tailings pond and maintaining them in an unsaturated condition did not appear to pose any long term risk of contamination of ground water. However, all our previous assessments were based on maintaining the tailings in a free draining state. To allow the tailings to become saturated will increase the hydraulic head on the bottom liner and increase the potential for an unexceptable release of contaminated fluids. In addition, the tailings should remain unsaturated so that with time, oxygen will neutralize much of the cyanide.

Therefore, we recommend Hecla should periodically measure the flow rate, or by some other means determine when the drain will cease flowing. If calculations show the volume of water remaining in the tailings were negligible, then perhaps sealing of the drain would be in order.

Wayne Hedberg Page 2 March 3, 1994

Should you have any questions, please call Mack Croft at (801) 538-6084.

Sincerely,

Fred C. Pehrson, P.E., Manager

Permits, Compliance & Monitoring Branch

FCP:MGC:wfm

cc: Wayne Thomas

Gary Gamble, Hecla Mining Co.

P:HECLA/DRAINPIPE.LTR FILE:HECLA